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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/510,110

10/04/2004

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EXAMINER

LIN, WEN TAI

ART UNIT

PAPER NUMBER

2154

MAIL DATE

DELIVERY MODE

03/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/510,110	Applicant(s) MARTINOT ET AL.	
	Examiner Wen-Tai Lin	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-6 are presented for examination.
2. The text of those sections of Title 35, USC code not included in this action can be found in the prior Office Action.
3. Claims 1 and 6 are objected to because the use of the word "characterized" is inappropriate since 35 U.S.C. 112, second paragraph, requires the claim to particularly point out and distinctly claim the invention, not merely its characteristics. Furthermore, if this word is eliminated, then the remaining format of the claim should be modified in order to reflect this correction.

Claim Rejections - 35 USC § 112

4. Claims 1-6 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Specifically, claims 1 and 5 each requiring

means (2) for instantiating said logical rules, said instantiation being effected as a function of said service and independently of the technology of said network,
said means (2) for determining measurement points independently of the technology of
said network

The most relevant teaching in the specification is found at lines 22-25 on page 4, which states:

As a function of the SLS parameters coming from the means 1, the means 2 search the means 3 for the logical rules necessary for setting up the measurement and determine from those rules the measurement points for setting up the quality of service measurement.

As a key element in the effort of automating the placement of QoS measurement points in network-independent or technology-independent environments, the mere teaching about “mean 2” is that it is a function of SLS parameters, that it searches the collected logical rules that are derived from experts (page 2, lines 25-29), and that it determines from the rules the measurement points (page 4, lines 22-25), wherein the SLS parameters defines how a service must be processed on a network to respect a particular QoS (page 1, lines 19-20). Throughout the entire disclosure, there is no teachings, either in general description or via best mode examples, describing: how are the measurement points derived out of the logical rules and how do the SLS parameters effect the determination of these measurement points. It is submitted that Applicant’s disclosure has not enabled any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, as required by 35 USC 112, first paragraph.

Claim Rejections - 35 USC § 103

5. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellesson et al. (hereafter "Ellesson") [U.S. Pat. No. 6459682] in view of Official Notice.

6. Ellesson was cited in the previous office action.

7. As to claims 1 and 3, Ellesson teaches an architecture/system for implementing service level agreement (SLA) from which rules/policies associated with a quality of service are derived, the system has a pair of egress and ingress devices for controlling traffic flows [e.g., Fig. 1A-1B], wherein QoS performance monitoring is conducted by measuring traffic information at the egress and ingress devices [Abstract; col.5, line 63 – col. 6, line 15; col. 10, lines 30-41], with statistics stored in a policy/directory server [col.7, lines 16-45] and periodically polled for traffic control [col.7, lines 1-15].

Ellesson generally teaches about implementing a general SLA architecture with measurement points placed at the edge devices such as ingress and egress devices, which is inherently independent of network technology. Ellesson does not specifically teach that the measurement points are determined based on a set of logical rules collected from experts/operators.

However Official Notice is taken that the idea of establishing rules from experts or operators is well known in the art, in particular in the area of designing an expert system where all sort of rules are collected from human expertise in the respective fields.

It would have been obvious to one of ordinary skill in the art to use operator entered rules as foundation for placing the QoS measurement points in a general environment (i.e., network/technology independent) and instantiate the rules to find physical measurement points in specific network environment because (1) Ellesson's system is a rule-based SLA architecture and (2) by generalizing the placement of

measurement points from rules, Ellesson's method could be applied to a wide variety of network environments.

8. As to claim 2, Ellesson the system further comprising means for comparing said collected data with threshold values [e.g., col.5, lines 48-54].

9. As to claim 4, Ellesson teaches that the system further comprises means for entering technical parameters defining said service [e.g., col.1 lines 38-65].

10. As to claims 5-6, since the features of these claims can also be found in claims 1-4, they are rejected for the same reasons set forth in the rejection of claims 1-4 above.

11. Applicant's arguments filed on 1/14/08 for claims 1-6 have been fully considered but they are not deemed to be persuasive.

With respect to the rejection under USC 112 first paragraph, Applicant argues that the paragraph on page 4, lines 22-25 of the specification sufficiently discloses one embodiment of the means (2). The examiner respectfully disagrees. Specifically, means (2) in claim 1 is responsible for determining where to place measurement points in a network (for purpose of QoS monitoring) in accordance with instantiated logical rules. However, the paragraph on page 4 essentially states a similar limitation as shown in the claim language, rather than teaching "where" or "how" to place the measurement points. The examiner is open to any further effort of showing support of the adequacy of the

disclosure in this regard; until then the rejection under USC 112 first paragraph is maintained.

With respect to the prior art rejection, Applicant argues in the remarks that (1) Ellesson does not disclose deriving rules associated with an SLA or QoS at any point in the specification. The monitoring done in Ellesson is only monitoring of the performance of the network, not the measurement of the performance of the QoS device monitoring the performance of the network. (2) Applicant challenges the examiner's Official Notice statement "that the idea of establishing rules from experts or operators is well known in the art, in particular in the area of designing an expert system."

In response to point (1), Applicant is directed to Ellesson's teachings about a directory server, which is responsible for maintaining information about each customer's service levels; about policy rules for mapping traffic to one of the service levels etc. [col.7, lines 16-40]. Ellesson then teaches that traffic statistics and performance data such as delay and loss relates to traffic flows are collected at intermediate nodes [Abstract].

"The invention involves controlling packet traffic in an IP network of originating, receiving and intermediate nodes to meet performance objectives established by service level agreements. To implement the invention, traffic statistics and performance data such as delay and loss rates relating to traffic flows are collected at intermediate nodes. A central server processes the collected data to determine rates for different priorities of traffic." (col.3, lines 8-15).

In other words, Ellesson's network traffic measurement is based on each customer's priority derived from a respective service level agreement, instead of lumping all the traffic flows together (at each measuring node) to obtain an overall network

performance at that point. At col.5, lines 48-62, Ellesson further teaches QoS management policies such as adjusting individual traffic flow during congestion and imposing penalty when traffic contract is violated. To identify each traffic path, Ellesson teaches tracing a connectionless network path by starting with one or more edge nodes, followed by identifying its associated inter-nodes. Rule checking is based on the assigned initial traffic classes that are derived out of the service level agreement [e.g., claim 1]. As such, it is clear that Ellesson's QoS management is based on individual traffic flow belonging to each SLA holder. Since the traffic flows are being traced from their ingress to egress nodes, including all the inter-nodes along their respective paths, it is clear that the monitoring/measuring points for each traffic flow must also be sampled from the nodes along the same traffic flow path.

In response to point (2), two publications supporting the examiner's Official Notice statement are offered here. The first is a publication extracted from a popular web page (WiKibooks), which states that "[t]he most simple form of an expert system is a question-and-answer system, where a human user is presented with questions. The user answers these questions, and those answers are used to further the reasoning process of the expert system." Similar statement can be found in the seventh edition of "[t]he Authoritative Dictionary of IEEE Standards Terms," page 404-405 under the subject of "expert system", which states that "information processed by an expert system corresponds to rules or procedures applied by human experts to solve similar problems."

For at least the above reasons, it is submitted that the prior art of record reads on the claims.

12. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

13. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Examiner note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (571)272-3969. The examiner can normally be reached on Monday-Friday(8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(571) 273-8300 for official communications; and

(571) 273-3969 for status inquires draft communication.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen-Tai Lin

March 13, 2008

/Wen-Tai Lin/

Primary Examiner, Art Unit 2154